

University of Groningen

The timing of family commitments in the early work career

Koelet, S.; de Valk, H.A.G.; Glorieux, L.; Laurijssen, L.; Willaert, D.

Published in:
Demographic Research

DOI:
[10.4054/DemRes.2015.32.22](https://doi.org/10.4054/DemRes.2015.32.22)

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version
Publisher's PDF, also known as Version of record

Publication date:
2015

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):

Koelet, S., de Valk, H. A. G., Glorieux, L., Laurijssen, L., & Willaert, D. (2015). The timing of family commitments in the early work career: Work-family trajectories of young adults in Flanders. *Demographic Research*, 32(22), 657-690. <https://doi.org/10.4054/DemRes.2015.32.22>

Copyright

Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license. More information can be found on the University of Groningen website: <https://www.rug.nl/library/open-access/self-archiving-pure/taverne-amendment>.

Take-down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): <http://www.rug.nl/research/portal>. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.



DEMOGRAPHIC RESEARCH

A peer-reviewed, open-access journal of population sciences

DEMOGRAPHIC RESEARCH

VOLUME 32, ARTICLE 22, PAGES 657–690

PUBLISHED 4 MARCH 2015

<http://www.demographic-research.org/Volumes/Vol32/22/>

DOI: 10.4054/DemRes.2015.32.22

Research Article

The timing of family commitments in the early work career: Work-family trajectories of young adults in Flanders

Suzana Koelet

Helga de Valk

Ignace Glorieux

Ilse Laurijssen

Didier Willaert

©2015 Koelet, de Valk, Glorieux, Laurijssen & Willaert .

This open-access work is published under the terms of the Creative Commons Attribution NonCommercial License 2.0 Germany, which permits use, reproduction & distribution in any medium for non-commercial purposes, provided the original author(s) and source are given credit.

See <http://creativecommons.org/licenses/by-nc/2.0/de/>

Table of Contents

1	Introduction	658
2	The complex interplay between education, family, and work	659
3	Data and methods	662
4	A typology of life paths among young adults	664
5	Explaining different life paths: Variables	673
5.1	Education	674
5.2	Practical constraints	675
5.3	Methods	676
6	Explaining different life paths: Results	677
6.1	Pooled analyses for men and women (4 clusters)	677
6.2	Separate analyses for women (6 clusters)	680
7	Conclusions	681
	References	685

The timing of family commitments in the early work career: Work-family trajectories of young adults in Flanders

Suzana Koelet^{1,2}

Helga de Valk^{3,4}

Ignace Glorieux²

Ilse Laurijssen²

Didier Willaert³

Abstract

OBJECTIVE

This article examines the diverse ways in which young adults develop both their professional career and family life in the years immediately after they complete their education. Building a career and starting a family often occur simultaneously in this stage of life. By studying the simultaneous developments in these life domains, we can gain a better understanding of this complex interplay.

METHODS

The data consist of a sample of 1,657 young adults born in 1976 who were interviewed as part of the SONAR survey of Flanders at ages 23, 26, and 29 about their education, their entry into and early years on the labour market, and their family life. Sequence analysis is used to study the timing of union formation and having children among these young adults, as well as how these events are related to their work career. Multinomial regression analysis is applied to help us gain a better understanding of the extent to which these life course patterns are determined by education and economic status at the start of the career.

RESULTS

The results reveal a set of work-family trajectories which vary in terms of the extent of labour market participation and the type and timing of family formation. Various aspects of the trajectory are found to be determined by different dimensions of an

¹ Interface Demography, Department of Sociology, Vrije Universiteit Brussel, Belgium.
E-Mail: skoelet@vub.ac.be.

² Research group TOR, Department of Sociology, Vrije Universiteit Brussel, Belgium.

³ Interface Demography, Department of Sociology, Vrije Universiteit Brussel, Belgium.

⁴ Netherlands Interdisciplinary Demographic Institute, the Netherlands.

individual's educational career (duration, level, field of study). Education is more relevant for women than for men, as a man's trajectory is more likely than a woman's to be determined by the first job.

CONCLUSIONS

By using a simultaneous approach which takes into account both family and work, this life course analysis confirms that men have a head start on the labour market, and examines the factors which influence the distinct trajectories of young women and men.

1. Introduction

In this article we study the timing of family commitments in the early work careers of young adults using sequence analyses. Gaining insight into the ways in which family formation and career building coincide and interact with each other in this life stage can help us better understand the choices and (future) positions of women and men in the labour market. The difficulties associated with combining work and family in this particular period of life may lead young men and women to make decisions which can have far-reaching consequences (Moen and Sweet 2004), both in terms of their work career (e.g., deciding to take a career break or to work part time) and their family life (e.g., delaying parenthood). Studying trajectories allows us to link different transitions between work and family life, while taking the duration of each state into account (Stone, Netuveli, and Blane 2007).

In addition to identifying the main work-family trajectories among young women and men, we also aim to explain the differences and similarities between these trajectories. According to the literature, the heterogeneity in life courses is attributable to socio-structural and cultural factors, or to subjective factors and preferences (Aassve, Billari, and Piccarreta 2007; McRae 2003). Education seems to play a crucial role, as a wide range of studies have shown that an individual's educational level can affect (the timing of) his or her family formation decisions and labour outcomes (Anderson, Binder, and Krause 2002, 2003; Budig and Hodges 2010; Dex et al. 1998; Gustafsson 2003; Liefbroer and Corijn 1999; Rindfuss, Morgan, and Offutt 1996). The amount of time young people spend in education or a field of education has been studied to a lesser extent, but the existing work has indicated that this factor is also non-negligible (Blossfeld and Huinink 1991; Hank 2002; Hoem 1986; Kalmijn 1996; Kreyenfeld 2000; Lappegård 2002; Lappegård and Rønsen 2005; Van Bavel 2010).

In this paper we examine how an individual's level, duration, and type of education interacts with his or her family and work careers. We expand on previous work by taking the labour market entry experiences of individual young adults into

account, and also include information on the life stage of each individual's partner in explaining his or her work-life trajectory. These factors are treated as practical constraints that mould the path of each young adult. Second, although the literature has mainly captured the consequences of family formation for women, we include both men and women in our study. We analyse how the typical life course and the factors leading to various work-life trajectories differ by gender.

We focus on Flanders, using unique panel data which follow young adults through their family formation and career building years. These unique data can be seen as a case study, and as a starting point for further analyses in other societal contexts.

2. The complex interplay between education, family, and work

Only a few decades ago, family and work constituted two parallel worlds in most north-western European countries. Women were mostly oriented towards family life. Once married, they were expected to stop participating in the labour force and to become full-time mothers and housekeepers. Meanwhile, men were oriented towards the work sphere, and were expected to provide financially for their family. Both the average age at marriage and the average age at the birth of the first child were low, as women married and had children soon after completing their education (Esping-Andersen 2009).

The rapid expansion of education and the availability of modern birth control changed these traditional gender roles. As a result of the expansion of education, the opportunity costs for mothers to stay at home and take care of the children rose (Becker 1985). But while women increasingly entered the labour force, men did not enter the private sphere of household work and childcare in equal numbers (for Flanders, see, e.g., Koelet 2005). Esping-Andersen (2009) refers to this as the incomplete revolution; i.e., a sub-optimal development that inevitably led to disequilibria in family life.

Today, young men and women are juggling their responsibilities in an effort to find a workable equilibrium between their multiple roles. Work and other pressures tend to pile up in this early life stage (Glorieux et al. 2010; Laurijssen and Glorieux 2010; Moen and Sweet 2004). As a consequence, many couples, especially those with children, are increasingly adopting what might be described as a neo-traditional arrangement, in which the career of the male partner takes priority over that of the female partner (Koelet 2005).

Several studies have demonstrated that family commitments mainly affect the careers of women (Baerts, Deschacht, and Guerry 2008). For men, living with a partner leads to a marriage premium on the labour market, as married men tend to earn more than unmarried men (Korenman and Neumark 1991; Waite 1995; Pollmann-Schult

2011). For women, by contrast, a marriage penalty has been identified with respect to both earnings and promotions (Cobb-Clark and Dunlop 1999). Although recent studies have shown that positive selection explains a large part of the male marriage premium (Petersen, Penner, and Hogsnes 2011), the female marriage penalty is found to reflect the increased specialisation of women in home production and childcare after marriage (Ginther and Sundström 2010).

Similarly, women, unlike men, experience systematic career disadvantages when they enter parenthood. This is often referred to as the *child penalty*, *motherhood penalty*, or *family gap*. Mothers earn less on the labour market than women without children, even after controlling for factors such as human capital, labour experience, and part-time work (Waldfogel 1997; Taniguchi 1999; Budig and England 2001; Anderson, Binder, and Krause 2002; Fernández-Kranz, Lacuesta, and Rodríguez-Planas 2010). Mothers have less supervisory authority (Rosenfeld, Van Buren, and Kallberg 1998) and their odds of promotion are reduced (Cobb-Clark and Dunlop 1999). Many women decide to work part time or stay home full time after the birth of a child (e.g., Kan 2007; Klerman and Leibowitz 1999; Laurijssen 2012).

While it is clear that family commitments can significantly influence the careers of men and women in various ways, it is equally apparent that work can influence family life. For example, having high earnings and strong socio-economic prospects increases the likelihood that a young man will marry (Oppenheimer 2003), and the stability of his work career may determine at least in part the timing of his marriage (Oppenheimer 1988). Meanwhile, being unemployed may be expected to delay the point at which a young man starts a family, particularly in Belgium (Liefbroer and Corijn 1999). For a woman, the expected cost of having children on her labour market career may be expected to influence both the number of children she has and the timing of their births, according to Becker's fertility model (1985). Research by Liefbroer (2005) has found effects on the timing of entry into parenthood for both men and women. His results suggest that it is important to consider the characteristics of the partner as well, as having a steady partner, and the partner's characteristics in terms of labour market position and life course stage, are conditioning factors.

Life course events in the area of family and work are thus closely interrelated (Moen and Sweet 2004), and young adults must balance these commitments as they progress through life (Blossfeld 1995; Kurz, Steinhage, and Golsch 2005; Mills and Blossfeld 2005; Mills 2004; Oppenheimer, Kalmijn, and Lim 1997; Oppenheimer 1988, 2003). Using the life course perspective can help us gain a better understanding of this simultaneity of career building and family building (Dex 1991), and the changing conditions and future options to which they are subject (Elder 1994). In addition, decisions and transitions made early in the life course can affect the future course of

events. For our study, we focus on the ways in which education can influence an individual's work-life balance over his or her life course.

Educational level determines the speed and immediacy which with an individual enters the labour market and finds employment. This holds for many contexts, and is especially the case in Belgium (Kogan and Schubert 2003: 3). Recent graduates with high levels of educational attainment tend to enter occupations with significantly higher earnings and status than average (Kogan and Schubert 2003). This in turn influences both the occurrence and the timing of marriage and parenthood, as discussed above. The potential impact of having children on earnings and promotion opportunities is greater for highly educated women than for women with less education (Anderson, Binder, and Krause 2002, 2003). Thus, compared to less educated women, highly educated women may be expected to postpone childbearing for longer periods to minimise the impact on their work career (Taniguchi 1999; Drolet 2002; Gustafsson 2003; Miller 2011). At the same time, highly educated women in well-paid jobs may have more flexibility than less educated women to combine work and family, as they are more likely to have the resources to outsource care (Budig and Hodges 2010). Education is therefore often considered the main factor in whether a woman continues to work after having children (Dex et al. 1998; Budig and Hodges 2010).

The fact that women increasingly have high levels of education also implies that, on average, women spend more years in education than in the past. Despite this trend, combining motherhood and participation in education is still not broadly accepted. Blossfeld and Huinink (1991) have argued that it is these transition norms in combination with the increased period spent in education which result in a delay in motherhood. A number of studies have shown that after graduating, highly educated women have their first child more quickly than less educated women because they feel their reproductive period has been greatly curtailed by the years they spent in education (Blossfeld 1995; Gustafsson, Kenjoh, and Wetzels 2002; Gustafsson 2005; Hank 2002; Kravdal 1994; Lappegård and Rønsen 2005; Liefbroer and Corijn 1999; Skirbekk, Kohler, and Prskawetz 2004).

In addition to educational level and the length of time spent in education, several authors have observed that the field of study can influence the relationship between work and family (Hoem, Neyer, and Andersson 2006; Kalmijn 1996; Lappegård 2002). Van Bavel (2010) has shown that fertility postponement is relatively limited among graduates of study disciplines in which stereotypical family attitudes prevail, and in which a large share of graduates are female. According to Hoem, Neyer, and Andersson (2006), women who have trained for jobs in teaching or health care have on average much higher fertility than women in other fields of education. Duquet et al. (2010) found equal effects of the field of study on men and women, but that family formation had a negative impact on the labour market position of women only. Moreover, the field

of study may reflect not only distinct preferences and priorities, but also differences in opportunity costs (Lappegård and Rønsen 2005). Each discipline leads to specific occupations or employment sectors with working conditions which are more or less compatible with childbearing and childrearing. The economic opportunity costs associated with a career break may thus vary from sector to sector, and women in different sectors may need varying amounts of time after completing school to get a good foothold in the labour market (Lappegård and Rønsen 2005).

3. Data and methods

Our data consist of a sample of 1,657 women and men from the Flemish longitudinal SONAR study. These young adults were born in 1976, and were interviewed at ages 23, 26, and 29 about their educational path, as well as about their entry into the labour market and their early years of work. In each interview, information on their current situation was gathered and supplemented by retrospective data on their past labour market experiences and family career. Using this approach, we were able to trace each life course transition in terms of education, work, and family to the exact month between the ages of 12 and 29. We limited our analysis to the respondents' experiences between ages 14 and 29 (=181 time registrations), and excluded 59 respondents with incomplete information.

In order to create individual work-family trajectories for all of the respondents in the sample, we combined three sequences referring to transitions related to (1) work, (2) union formation, and (3) fertility (cf. Aassve, Billari, and Piccarreta 2007). Our data allow for a relatively⁵ detailed classification of each respondent's working career. We distinguish between periods of initial or higher education (S), periods of part-time work (<100%) (P), periods of full-time work (F), and periods of not working (not in initial or higher education, nor in paid work) (O). As our focus is primarily on work and family, a respondent who left education at a certain point, but returned to education later while not in a paid job, is labelled as not working. Respondents on a full-time career break or on parental leave are also labelled as not working. In our analysis, union formation refers to the exact moment when a couple starts living together, with two possible states: "U" refers to living together with a partner, while "zero" indicates that this young adult is not (yet) cohabiting. In order to measure the presence of children, we distinguish between the number of children (zero, one, two, and three or more). Combining all statuses results in 32 possible situations (Table 1). Juxtaposing these statuses for 181 time registrations (months) gives us the individual sequences

⁵ This approach is more detailed than the analyses of Aassve, Billari, and Piccarreta (2007: 373), who only make the distinction between working and not working.

describing the work-family trajectories of these Flemish young adults between the ages of 14 and 29.

Table 1: Possible life course states

		Education	Part-time work	Full-time work	Not working
<u>Union formation</u>	<u>Children</u>				
Not cohabiting	0	S00	P00	F00	000
	1	S01	P01	F01	001
	2	S02	P02	F02	002
	3+	S03	P03	F03	003
Cohabiting	0	SU0	PU0	FU0	0U0
	1	SU1	PU1	FU1	0U1
	2	SU2	PU2	FU2	0U2
	3+	SU3	PU3	FU3	0U3

Source: SONAR c76(23-26-29)

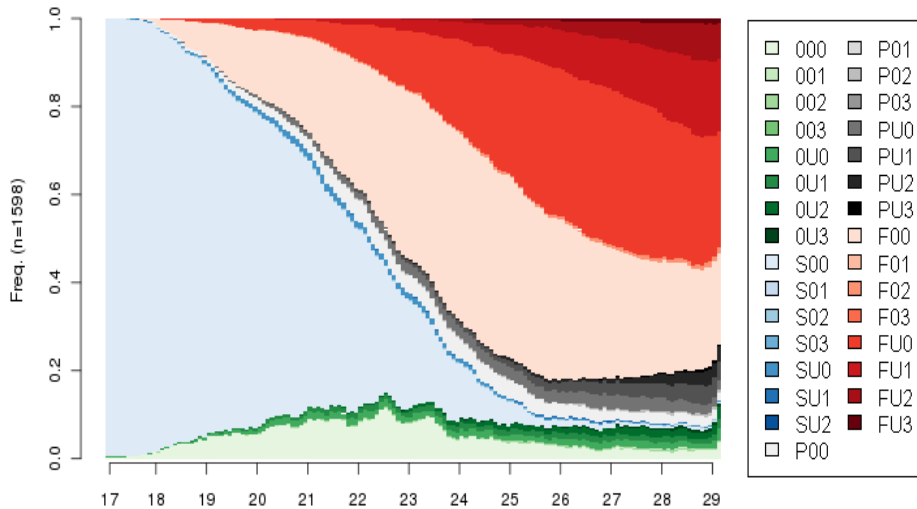
A general overview of the trajectories for all of the respondents in the sample can be found in Figure 1. The graph shows the proportion of young adults in the various states. The different colours refer to the labour market position (columns in Table 1; blue = education, grey = part-time work, red = full-time work, green = not working). The intensity of the colours indicates how far they have progressed in terms of family formation (rows in Table 1; light colours = no family formation, dark colours = advanced family formation with partner and children). We have omitted the first three years (age 14 to age 16) of observation in the graph since these years were almost uniformly spent in education, not cohabiting, and without children. Figure 1 corresponds to the so-called “normative” or standard life pattern (Hogan 1978). Generally, young adults start a full-time job almost immediately after graduation, then marry or cohabit, and then have children.

Starting from the individual sequences we constructed a typology of work-family trajectories by applying optimal matching (OM) (Abbott and Forest 1986; Abbott and Hrycak 1990; Abbott and Tsay 2000; Abbott 1984; Lesnard 2006; and more specifically for the analysis of work-family trajectories Aassve, Billari, and Piccarreta 2007). This method determines the distance between each pair of sequences for the subjects in the sample which expresses how difficult it is for one sequence to be transformed into another⁶. The result is a distance matrix which is used for the cluster

⁶ Transformation costs for substitutions were calculated based on the frequency at which transitions from one status to the other occur in the sample (Rohwer and Pötter 2005). The costs of insertion and deletion were set sufficiently high (i.e., two) to prevent this transformation from being applied frequently. The OMA-analysis was conducted in R with TraMineR (Gabadinho et al. 2011).

analysis of the most similar work-family trajectories. This cluster analysis gave a nine-cluster solution⁷. As some of these clusters differed only in terms of the amount of time spent in education, we merged several clusters to create six clusters.

Figure 1: Work-family trajectories of young adults in Flanders, by age (17–29 years)



Source: SONAR c76(23-26-29)

Below we give a detailed description of the six clusters. The description is guided by cluster-specific graphs similar to those in Figure 1. Two graphs, one for men and one for women, are shown for each cluster.

4. A typology of life paths among young adults

The first four clusters of the found typology (i.e., the first eight graphs) (see Figures 2 to 5) are characterised by a long period of education followed by a long period of mainly full-time labour market participation, which is only very occasionally

⁷ Cluster analyses using the Ward criterion were used. A solution with nine clusters explains about 32% of the variance in the distance measure. Increasing the number of clusters further reduces the residual variance only marginally. More information on the nine-cluster typology can be provided on request.

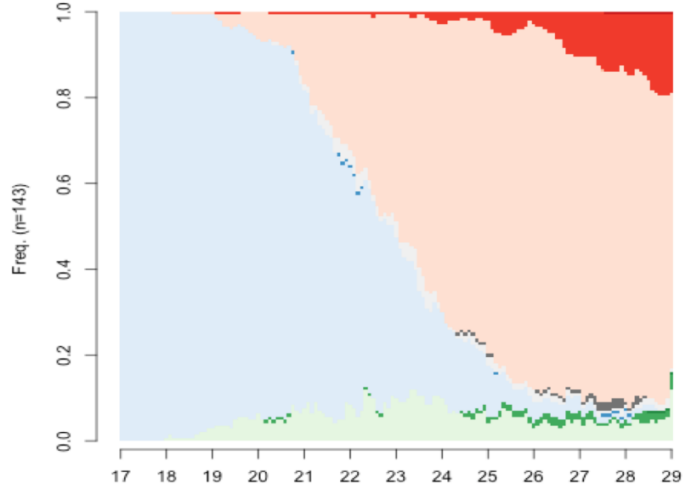
interrupted by brief periods of unemployment or part-time work. More than 80% of the Flemish young adults experienced this type of work trajectory (Table 2). But the respondents' experiences in relation to family formation differed.

The young adults in the first two clusters (Figures 2 and 3) had almost no or very few family responsibilities during their early work career (cf. the light colouring in Figures 2 and 3). We have labelled them the *unconstrained workers* and the *initially unconstrained workers*. They represent almost half of the 29-year-olds (48%), but are primarily men. More than six out of 10 men, but only three out of 10 women, experienced an (initially) unconstrained work trajectory before age 29. The main difference between the *unconstrained workers* and the *initially unconstrained workers* is in the timing of family formation. About one in four (28%) of the 29-year-olds had started working full time after graduation and were still single (i.e., unconstrained workers) (Figure 2). A total of 37% of 29-year-old men, compared with 18% of 29-year-old women, had the opportunity to build a career in their early years on the labour market without having (direct) family responsibilities. Initially unconstrained workers, on the other hand, were also able to acquire some labour market experience without having family responsibilities, but eventually settled down with a partner (Figure 3). However, this latter group of young adults had not progressed to parenthood by the age of 29. This path was also followed by more men than women (26% versus 14%).

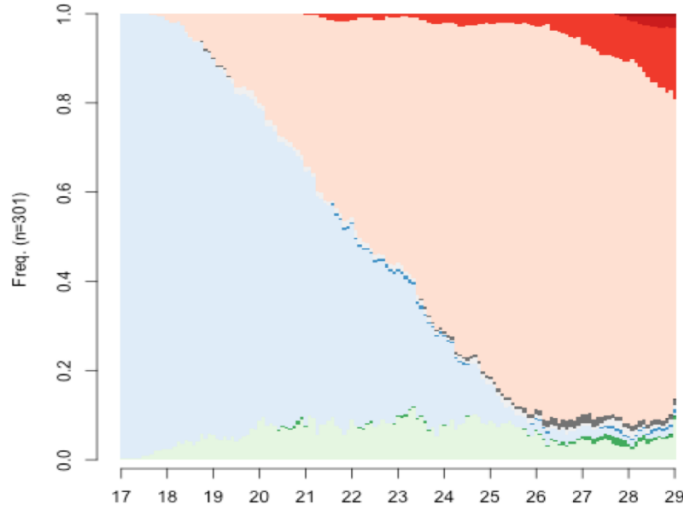
Family formation manifests itself much earlier in the work trajectories of the young adults in the next two clusters (hence the more intense colouring in Figures 4 and 5). We have labelled them the *partner-constrained workers* and the *family-constrained workers*. The family formation of partner-constrained workers is limited to union formation, and thus does not (yet) include children (Figure 4). Men and women in this cluster started living with their partner relatively soon after leaving education, but postponed parenthood. Around 13% of all young men and 14% of all young women followed this partner-constrained path. The family-constrained workers, by contrast, combined their full-time career fairly early with substantial family commitments (Figure 5). These respondents started living with their partner soon after (or for some women, even before) leaving education, and they started having children early. This trajectory was more common among women than men: 28% of women but only 16% of men started their early work career with large family responsibilities. While the respondents in this cluster were mainly in full-time employment, the graphs for men and women differ slightly, revealing limited shifts to part-time work among the mothers in this group (such shifts are not found among men).

Figure 2: Work family trajectories of unconstrained workers (Cluster 1, ages 17-29, Flanders)

2A. Women



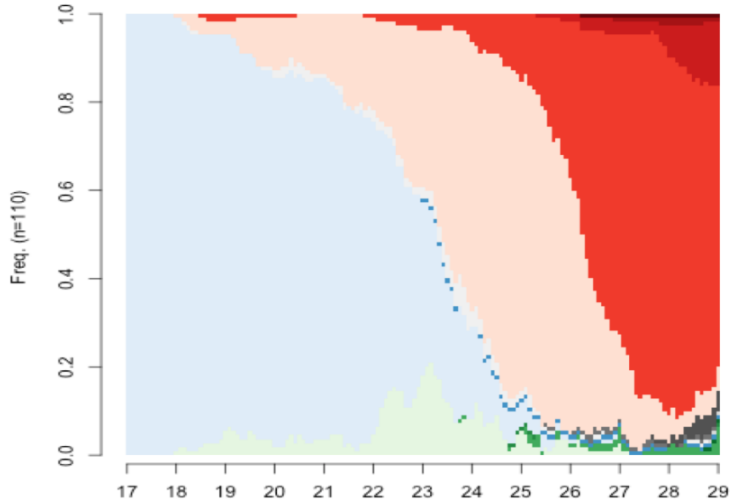
2B. Men



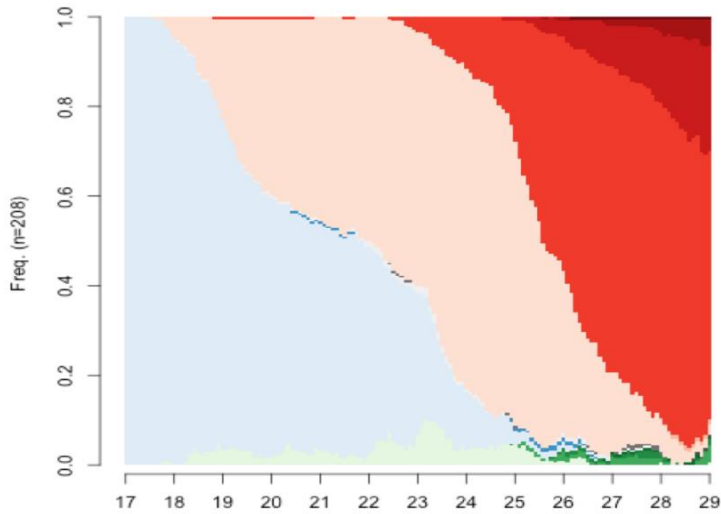
Source: SONAR c76(23-26-29)

Figure 3: Work family trajectories of initially unconstrained workers (Cluster 2, ages 17-29, Flanders)

3A. Women



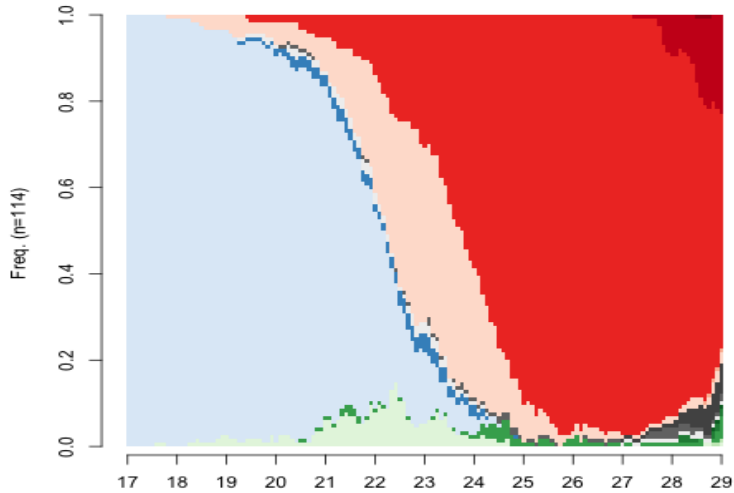
3B. Men



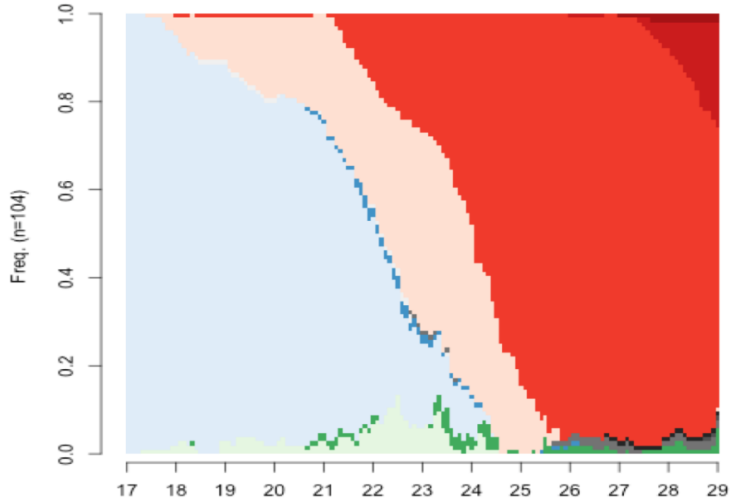
Source: SONAR c76(23-26-29)

Figure 4: Work family trajectories of partner- constrained workers (Cluster 3, ages 17-29, Flanders)

4A. Women



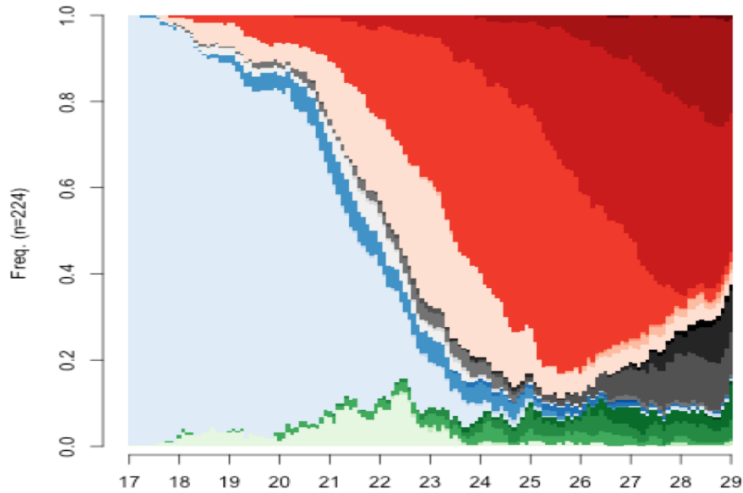
4B. Men



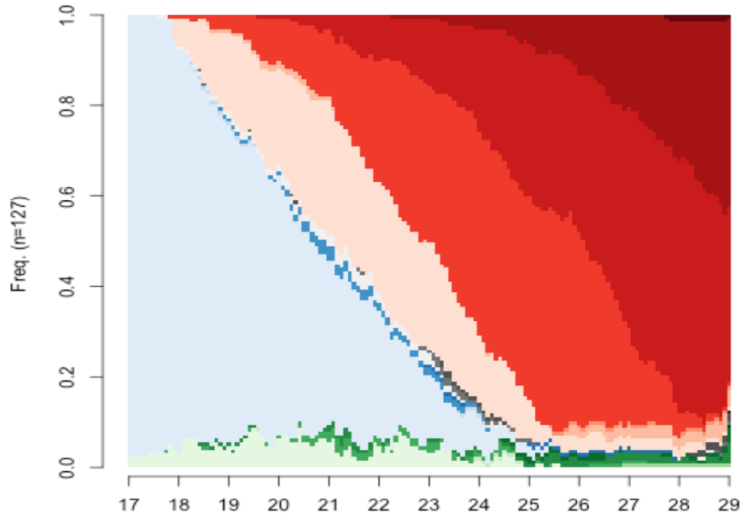
Source: SONAR c76(23-26-29)

Figure 5: Work family trajectories of family-constrained workers (Cluster 4, ages 17-29, Flanders)

5A. Women



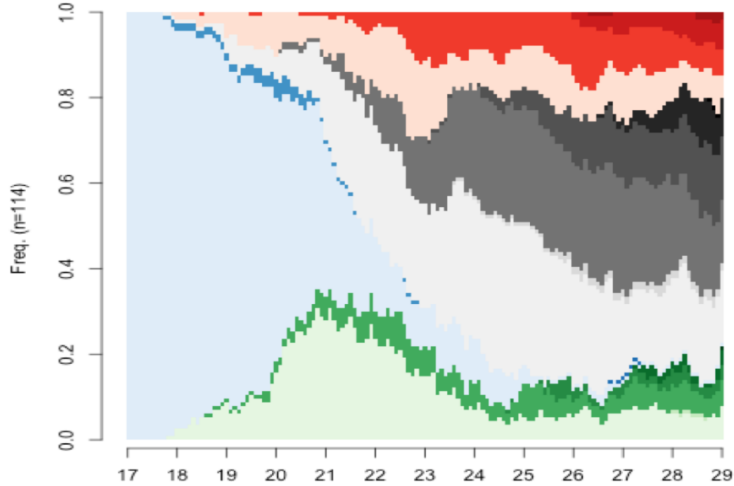
5B. Men



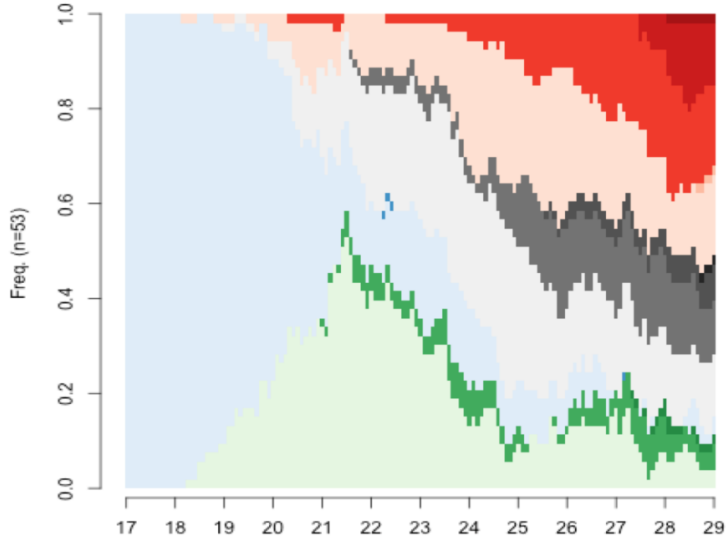
Source: SONAR c76(23-26-29)

Figure 6: Work family trajectories of initially unconstrained part-time workers (Cluster 5, ages 17-29, Flanders)

6A. Women



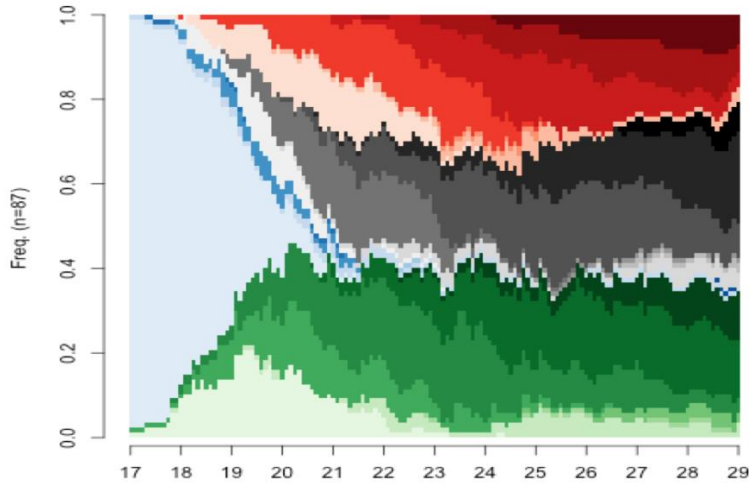
6B. Men



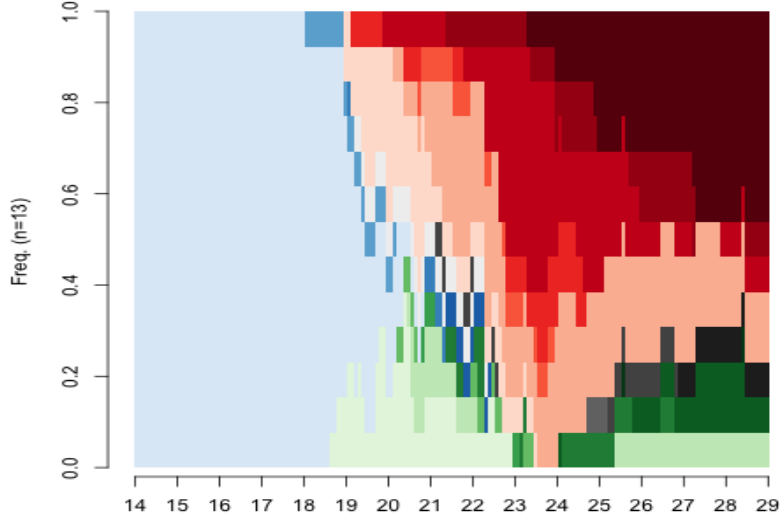
Source: SONAR c76(23-26-29)

Figure 7: Work family trajectories of the family-constrained with mixed work-family strategies (Cluster 6, ages 17-29, Flanders)

7A. Women



7B. Men



Source: SONAR c76(23-26-29)

The final two clusters stand out in terms of labour market participation. Full-time work played a less important role in these trajectories (cf. less red in Figures 6 and 7). Besides being the most female-dominated of the clusters in the analysis (25% of women and 9% of men followed these paths), they are also the most heterogeneous. A characterisation of the clusters according to their “medoid sequence” is therefore appropriate (see Table 2). The medoid sequence is the individual sequence least distant from all of the other sequences in the cluster. The respondents in the first of these two clusters generally had difficulties finding a first job, and had longer intervals of part-time work (Figure 6). This part-time work does not appear to have been related to childcare. Only a small share of the 29-year-olds in this group had children, and they had become parents only very recently. Family formation was mainly limited to union formation. Most of the respondents were in part-time work before they started a family. This cluster is labelled as *initially unconstrained part-time workers*.

The deviation from the full-time work pattern seems to be more clearly linked with family formation in the last cluster (Figure 7). This group stands out for their early family formation with children, which resulted in this group having a higher number of children than the cluster of family-constrained workers. The strategies for handling this combination of work and family are diverse (see the large variance in Table 2), and include longer periods of not working or working part time, at least for women. Among the latter cluster we find mothers with fragmented labour market participation, stay-at-home mothers, women who started working part time after having children, as well as many single mothers. The name of the cluster is derived from this diversity: *family-constrained with mixed work-family strategies*. While 11% of all 29-year-old women belong to this cluster, the number of men in this cluster is very small (N=13). A closer look at their individual work-family trajectories reveals a somewhat divergent profile (not in the graph). Most of the men (eight out of 13) are assigned to the cluster because of their (often full-time working) single-father status at some point in their trajectory. The remaining men are fathers in education, full-time working fathers with at least three children, and a few fathers who combine working part time and not working with raising children.

Table 2: Short description of the six work-family trajectories (N=1598)

Cluster		Short description + medoid	Variance*	% T	% ♂	% ♀
UW	Unconstrained worker	Full-time worker, no family formation Medoid: (S00,115)-(F00,66)	51	28%	37%	18%
IUW	Initially unconstrained worker	Full-time worker, initial labour market experience without family formation, eventually union formation, hardly any children (yet) Medoid: (S00,114)-(000,2)-(F00,32)-(FU0,33)	61	20%	26%	14%
PW	Partner-constrained worker	Full-time worker, early union formation without children Medoid: (S00,100)-(F00,18)-(FU0,63)	44	14%	13%	14%
FW	Family-constrained worker	Full-time worker, early family formation with children Medoid: (S00,107)-(000,2)-(F00,11)-(FU0,37)-(FU1,24)	82	22%	16%	28%
IUPW	Initially unconstrained part-time worker	Longer periods of part-time work, initially without family formation Medoid: (S00,86)-(000,30)-(F00,9)-(P00,36)-(PU0,20)	93	11%	7%	14%
FM	Family-constrained with mixed work-family strategies	Mixed work and family strategies, early family formation with children Medoid: (S00,65)-(000,6)-(OU0,6)-(OU1,43)-(OU2,32)-(PU2,29)	114	6%	2%	11%

Source: SONAR c76(23-26-29)

* Minimal distance = 0; Maximal distance = 362; Mean distance = 173

5. Explaining different life paths: Variables

Next, we use multinomial logistic regression to find out whether differences at the start of the work-family career can explain the variance in work-family trajectories found among young adults in Flanders. We are especially interested in finding out (1) whether the respondents' educational path can predict the timing and extent of their family commitments, and the specific combinations of work and family in the trajectories. We will also look (2) at the practical constraints—like finding a job, having a partner, or the position of the partner in the labour market—which might lead the respondents to a

specific path. Furthermore, we want to know whether these influences varied between men and women. We start with a description of the variables in our analysis.

5.1 Education

The first three variables in our analysis are related to education. In the SONAR study, respondents were asked about their current studies and their educational paths since the last interview. From this information, three educational variables were distilled, referring to the three dimensions discussed earlier: educational level, time in education, and field of study. Basic descriptive statistics for these variables can be found in Table 3, together with the reference category for each of the variables.

Educational level refers to the highest diploma obtained as of age 29. Since the research population of the SONAR study is relatively young (cohort 1976), the level of education in the group is relatively high (see Table 3). Moreover, highly educated young adults are overrepresented in the SONAR study. The percentage of 30- to 34-year-olds with a higher education in the Flemish population in 2005 was 40%, whereas 54% of the 29-year-olds in the SONAR study had a tertiary degree. Educational level is reduced to four categories for analyses: no diploma or primary education, secondary education, non-university tertiary education, and university-level higher education.

The number of years enrolled in education is measured starting from the first month in secondary school (around the age of 12) until the first month the student left education for (1) at least a year, or (2) left education for one month and started working or looking for a job immediately thereafter. Since the number of years in education and the educational level are closely related ($\eta=0.769$; $p=0.000$), we include the residual effect of duration of education in our analyses. To do this, we deduct the number of years in education as estimated by educational level from the actual number of years spent in education. The resulting variable refers to the extra number of years spent in education for obtaining a specific educational level. There are a number of possible reasons for this “delay” (e.g., repeating a year, longer or shorter courses in higher education, or students accumulating various same-level diplomas). The obtained variable allows us to study the effect of time spent in education over and beyond the effect of educational level.

For the classification of field of study we start with Van Bavel’s (2010) adaptation of the classification used in the European Social Survey, which has 14 categories. In order to obtain a classification independent of educational level, we reduced this number to five key domains: arts and humanities, science and technology, private and public administration, health care, and personal care services. All of the fields of study related to teaching, training, or education were included in the personal care services

category, and those related to law and legal services were assigned to private and public administration (cf. the field of social sciences, business, and law in the CEDEFOP adaptation of Andersson and Olsson 1999). As these categories refer to the last year before leaving education, this information could be included for all young adults, irrespective of whether a diploma was obtained. If none of the five areas of study could be assigned, the variable was defined and included in the analyses as missing (N=80).

5.2 Practical constraints

Two indicators are used for measuring the difficulties respondents faced in finding a first job, and the prestige of this first job. The duration until the first (stable) job is measured by the number of months between leaving education and finding a job with a permanent contract, or which lasted for at least six months. Because we want to measure job uncertainty at the start of the career, we only consider the first year after education (6% of all respondents had not found a stable job within this time frame). To measure the prestige of the first job, the occupations were coded according to the Occupational Classification 1992 of Statistics Netherlands (SBC 92). These codes were then converted to the occupational prestige scale developed by Sixma and Ultee (1983), which reaches a minimum of 13 and a maximum of 87 within our sample.

In our data, we also have information on the partner status at age 23 (which combines information on the presence of a stable relationship and the labour market position of the partner). This information was used to define four different positions of the respondent at age 23: no stable relationship, a stable relationship with a studying partner; a stable relationship with a non-working, non-studying partner; and a stable relationship with a working partner.

Table 3: Descriptive statistics of the independent variables in the multinomial logistic regressions

	Women (N=792)	Men (N=806)
Educational level	N=792	N=806
No secondary education	6%	12%
Secondary education	30%	44%
Non-university tertiary education	42%	23%
University tertiary education	22%	21%
Number of years in education (residue of educational level)	N=792 Mean= 8.4 S ² = 2.149	N=806 Mean=8.1 S ² =2.285
Field of study	N=765	N=743
Arts & humanities	10%	12%
Science & technology	9%	53%
Private & public administration	28%	19%
Health care	24%	4%
Personal care services	29%	12%
Duration until first stable job in months	N=788 Mean=2.6 S ² =5.3	N=806 Mean=1.7 S ² =4.1
Prestige in first job	N=782 Mean=46.4 S ² =19.057	N=799 Mean=44.8 S ² =20.001
Relationship status at age 23	N=789	N=799
No stable relationship	28%	42%
Stable relationship with studying partner	6%	21%
Stable relationship with non-working, non-studying partner	12%	9%
Stable relationship with working partner	55%	29%

Source: SONAR c76(23-26-29)

5.3 Methods

We use multinomial logistic regression to estimate the odds that the young adults would follow a particular path in life given a specific level, duration, and field of education, as well as a specific set of practical constraints at the start of their careers. The reference category in the analyses is the family-constrained worker; the trajectory that comes closest to the normative life course referred to earlier in this article. We use a stepwise approach in which we introduce the education indicators first, followed by the variables referring to practical constraints. Since we are interested in finding out whether these factors influence the work-life trajectories of men and women differently, we add an

interaction term with gender into the pooled analyses. As the sample sizes do not allow us to separately analyse the initially unconstrained part-time workers (IUPW) and those with mixed work-family strategies (FM), these pooled first models (Table 4) are restricted to four clusters (UW, IUW, PW, and FW). We will then estimate models for women separately with all six clusters (Table 5), which should allow us to gain a better understanding of the factors leading to the non-full-time trajectories.

6. Explaining different life paths: Results

6.1 Pooled analyses for men and women (4 clusters)

In the discussion of the pooled analyses (Table 4), we start by comparing the partner-constrained workers with the family-constrained workers. Both clusters were characterised by early family formation, but the timing of parenthood differed. Contrasting the two pathways tells us about the factors which affect the postponement of parenthood early in the career (Model 1a). Here we did not immediately observe significant differences between men and women. Overall, young adults with a tertiary degree seem to have had higher odds of delaying parenthood than young adults with a secondary school diploma or less. This indicates that the highly educated were following a maximisation strategy, while the less educated proceeded much more quickly to parenthood after moving in with a partner. The same pattern of early parenthood was observed more regularly among young adults in female-dominated areas of study such as health care or personal care, which confirms the results of Van Bavel (2010).

The odds of belonging to the group of initially unconstrained workers rather than to the group of family-constrained workers tell us more about the timing of union formation. For this family transition, relevant differences were found between men and women. Educational level was not relevant for the timing of union formation among young men, but female university graduates stood out: they were more likely to have postponed union formation than other women. In terms of educational duration, no gender differences were found. The longer the young adults spent in education (after controlling for educational level), the more time it took them to move in with a partner after completing their education. This could point to a maximisation strategy, but the relationship could also be interpreted the other way around: young adults who were in a stable relationship while in education might have left education earlier or might have been motivated to finish their degree sooner in order to set up an independent household with their partner. Young adults with no stable relationship might in turn have been more motivated to accumulate academic degrees.

The odds of belonging to the group of unconstrained workers, rather than to the group of family-constrained workers, tell us more about how the two extremes of no family commitment versus full family commitment in the early career were related. Extra time spent in education raised the odds of having had an unconstrained rather than a family-constrained trajectory (or the other way around; see above). This trajectory was also more common (than the family-constrained trajectory) among young men who pursued studies in the arts and humanities.

Table 4: Pooled multinomial logistic regression model (4 clusters)

	1a: Education (Nagelkerke=0.194; N=1255)			1b: Education & practical constraints (Nagelkerke=0.484; N=1231)		
	UW/FW	IUW/FW	PW/FW	UW/FW	IUW/FW	PW/FW
	Exp(B)	Exp(B)	Exp(B)	Exp(B)	Exp(B)	Exp(B)
Sex (Ref: Women)	2.155	1.400	2.169	2.403	1.952	.448
Educational level (Ref: University)						
No secondary	0.286	<u>0.089</u>	0.419	1.034	.222	.382
Secondary	0.497	0.395	0.344	0.683	.667	<u>.283</u>
Non-university tertiary	0.540	0.282	0.971	1.011	<u>.439</u>	.974
Years in education (residue)	1.417	1.273	0.929	1.362	<u>1.262</u>	.935
Field of study (Ref: Personal care)						
Arts & humanities	1.073	2.320	2.553	1.165	<u>2.811</u>	2.781
Science & technology	1.428	2.164	<u>3.143</u>	2.623	<u>2.980</u>	<u>3.615</u>
Public & Private administration	1.228	1.751	3.219	1.502	2.109	3.771
Health care	1.042	0.699	1.477	1.539	.758	1.424
Educational level*Sex						
No secondary*Sex	1.159	8.916	.626	.589	7.952	2.097
Secondary*Sex	1.626	<u>2.724</u>	1.774	2.089	3.062	<u>4.960</u>
Non-univ. tertiary*Sex	2.138	5.500	2.709	1.649	5.209	<u>3.960</u>
Years in education*Sex	.825	.916	1.001	.783	.853	.913
Field of study*Sex						
Arts & humanities*Sex	<u>5.165</u>	1.211	1.001	2.509	.612	.690
Science & technology*Sex	.822	.451	.372	.358	<u>.259</u>	<u>.220</u>
Pub. & Priv. administration*Sex	1.446	2.872	.283	.714	2.694	.264
Health care*Sex	1.536	.881	.568	.996	.653	.408
Duration until first stable job (months)				1.076	1.021	1.006
Prestige in first job (0-100)				1.002	1.008	.998
Relationship status at 23 (Ref: Stable relationship with working partner)						
No stable relationship				26.162	5.126	1.370
Stable with studying partner				1.235	.405	.680
Stable with non-working/ studying partner				<u>4.175</u>	<u>4.391</u>	1.125
Duration until first stable job*Sex				.920	<u>.854</u>	.944
Prestige in first job*Sex				.994	.991	1.026
Relationship status at 23*Sex						
No stable relationship*Sex				6.325	<u>4.907</u>	2.773
Stable with studying partner*Sex				.816	1.430	1.521
Stable with non-working, non-studying partner*Sex				2.238	1.063	1.086

Source: SONAR c76(23-26-29)

Note: Significance levels: underlined: p<0.05; bold: p<0.01/ Clusters: UW=unconstrained worker, IUW=initially unconstrained worker, PW=partner-constrained worker, FW=family-constrained worker.

It is clear that all three dimensions of education—educational level, number of years in education and field of study—were relevant to the type of work-family trajectory young adults followed in their early careers. Moreover, it appears that each of these dimensions influenced other aspects of this trajectory. In a next step, we introduced practical constraints into the analysis in order to find out how these factors affected each respondent's work-life trajectory and its relationship to education (Table 4 – Model 1b). Among women, their employment opportunities at the start of their career did not seem to influence their work-family trajectory. By contrast, men who found their first job quickly seem to have prioritised building a career over starting a family, at least at first (IUW vs. FW). Among men, the higher the prestige of their first job, the higher the probability that the transition to parenthood was delayed (PW vs. FW); although this interaction effect with sex did not scrape past the significance level ($p=0.066$). The effect of relationship status at age 23 was important for both sexes. It is evident that not having a stable partner at the age of 23 diminished the odds of residential union formation early in the work career (even more so for men than for women, probably due to age differences in the couple). But it is especially interesting to note that the life stage of the partner was also a decisive factor. Having a stable relationship with a partner who was still in education diminished the odds of early union formation. If the partner had already completed his or her education, it did not seem to matter whether he or she had a paid job.

After controlling for practical constraints, the effect of education on the work-family trajectory becomes more gender specific. These patterns were already present before controlling for practical constraints, but did not reach statistical significance then. It is now clear that the positive effect of level of education on postponement of parenthood does not hold for academically formed men. On the contrary, for men at this level of education the odds of following a partner-constrained rather than a family-constrained work trajectory were lower again, almost matching those of the lowest educated men. The higher odds of parenthood postponement in male-dominated areas of study in addition applied only to women when practical constraints were held constant. The higher odds of having an unconstrained rather than a family-constrained work career among young men in arts and humanities, in turn, was linked to the fact that they were less likely to have had a stable relationship at age 23 than young women in this area of study. After controlling for relationship status, we found that both young women and young men who pursued studies in the arts and humanities were more likely to have postponed family formation (IUW vs. FW) than young adults in female-dominated study areas.

6.2 Separate analyses for women (6 clusters)

The separate analyses for women allowed us to include the initially unconstrained part-time workers and the family-constrained with mixed work-family strategies (Table 5). These two clusters were relevant for women only, as they included only a small number of men. To ensure that we had a sufficient number of cases in all of the categories for this more limited group, we had to slightly redefine two independent variables. First, for the variable of field of study we combined the male-dominated areas of science and technology and public and private administration into a single category, and the female-dominated areas of personal care and health care into another category. Second, for the variable of relationship status we combined those respondents without a partner at age 23 with those whose partner was studying. Since the findings for the first four clusters were similar to those we described above (see Table 4), we focus here on the unconstrained part-time workers and the family-constrained with mixed work-family strategies.

One difficulty that arises when comparing the initially unconstrained part-time workers with the family-constrained workers is that they differed in terms of both their work and their family trajectory. The relative odds of belonging to the first cluster are higher for less educated women. Compared to highly educated women, women with a secondary education or less were three to five times more likely to have been initially unconstrained part-time workers rather than family-constrained workers. The trajectory showed no specific links with the area of study or the number of years in education.

The family-constrained workers with mixed work-family strategies and the family-constrained workers were the two groups who had children early in their career path, but who used different strategies for combining children and work. When we compared these groups, it became clear that the educational level played a large role. This finding confirms the importance of education in ensuring women's job continuity after motherhood. Women with a secondary education were 19 times more likely than women with a university degree to have applied mixed work-family strategies rather than to have continued working (mainly) full time if they had children relatively soon after leaving education. Among women with less than a secondary education diploma, the odds of having used these strategies were 73 times higher. The length of time spent in education was shown to have mattered as well. The longer a young woman spent in education, the more likely she was to have continued working (mainly) full time if she had entered parenthood soon after completing her education.

The introduction of practical constraints confirmed that early job uncertainty was associated with these non-full-time trajectories: the longer it took for a young woman to find a job in her first year after education, the more likely it was that she would continue in a work trajectory characterised by periods of part-time or no work, with or without early family formation.

Table 5: Multinomial logistic regression model for women (6 clusters)

	2a: Education (N=765; Nagelkerke=0.361)					2b: Education & practical constraints (N=748; Nagelkerke=0.518)				
	UW/FW Exp(B)	IUW/FW Exp(B)	PW/FW Exp(B)	IUPW/FW Exp(B)	FM/FW Exp(B)	UW/FW Exp(B)	IUW/FW Exp(B)	PW/FW Exp(B)	IUPW/FW Exp(B)	FM/FW Exp(B)
Educational level (Ref: University)										
No diploma secondary	0.274	<u>0.088</u>	0.365	4.862	73.342	0.689	0.185	0.305	<u>4.252</u>	22.002
Secondary	<u>0.493</u>	0.380	0.331	2.956	19.201	0.838	0.707	<u>0.268</u>	2.108	<u>7.314</u>
Non-university tertiary	0.551	0.292	0.945	1.110	0.437	1.034	<u>0.471</u>	0.952	1.307	0.365
Number of years in education (residue)	1.384	<u>1.221</u>	0.923	0.959	0.578	<u>1.283</u>	1.182	0.927	0.995	0.658
Field of study (Ref: Health & personal care)										
Arts & Humanities	1.007	<u>2.727</u>	2.149	2.020	0.430	0.709	<u>2.765</u>	2.345	1.534	0.379
Science & Technology & Public and Private administration	1.219	2.219	2.699	0.807	0.656	1.171	2.433	3.131	0.726	0.616
Relationship status at 23 (Ref: Stable relationship with working partner)										
No stable relationship or with studying partner						19.002	4.491	1.191	3.862	0.712
Stable relationship with non-working, non-studying partner						1.316	0.438	0.692	1.539	1.346
Duration until first stable job (months)						1.137	1.056	1.020	1.183	1.178
Prestige in first job (0-100)						1.002	1.011	0.998	0.993	0.980

Source: SONAR c76(23-26-29)

Note: Significance levels: underlined: $p < 0.05$; bold: $p < 0.01$ / Clusters: UW=unconstrained worker, IUW=initially unconstrained worker, PW=partner-constrained worker, FW=family-constrained worker.

7. Conclusions

Our aim in this article was to study the interrelatedness of the family and the work careers of young women *and* men, as well as the factors affecting these careers. We focused on data for Flanders which covered young adults between the ages of 14 and 29, a dense period of work-family decision-making with important consequences for later life. Our analyses revealed key differences in life course paths, and we identified six trajectories that vary in terms of the timing and the sequencing of work and family life events. Based on the timing of family formation, the type of family formation, and the type of labour market participation in the trajectories, we assigned the respondents to the following categories: unconstrained workers, initially unconstrained workers, partner-constrained workers, family-constrained workers, initially unconstrained part-time workers, and family-constrained workers with mixed work-family strategies. These trajectories illustrate the various interactions between family and labour force career decisions among young adults.

When we compared the trajectories of men and women, the gendered nature of the life paths was immediately apparent. The timing of family commitments in the working career was very different for men than for women. Educational homogamy and age differences in couples offered men a head start professionally, as they were more likely than women to have had the opportunity to develop their career without having family responsibilities. Among the 29-year-olds studied, 63% of the men but only 32% of the women fell into the category of unconstrained or at least initially unconstrained full-time workers. About one out of four (28%) women but only 16% of men combined having a full-time job with having a partner and children very soon after entering the labour market. Meanwhile, 11% of women but only 2% of men combined having periods of part-time work and/or not working with having large and early family commitments.

Although we identified these clearly gendered paths, we also observed a considerable degree of variation in the trajectories of both women and men. Our analyses clearly indicated that different aspects of education were key determinants of the trajectories followed. First, our findings support the maximisation hypothesis for women; i.e., that highly educated women are more likely than less educated women to postpone having children in order to maximise their investment in human capital. The group with the highest level of education (the university graduates) also postponed moving in with a partner early in their career. Indeed, the influence of the level of education on the family formation process manifested itself very early in this group. At age 23, the university graduates were already much less likely to have been in a stable relationship than women with less education (a finding that is corroborated by studies for many European countries, including Belgium, which have shown that female graduates have difficulties finding a partner; Van Bavel 2012). However, after these highly educated women made the transition to motherhood, they were more likely than less educated women to continue working full time. In light of these findings, it would appear that the labour force participation patterns of women in Flanders are more similar to those of women in Scandinavian countries than to those of women in the neighbouring countries of the Netherlands (where part-time work prevails among young mothers) and Germany (where mothers often leave the labour market after having a child). The question of the extent to which this higher level of full-time labour market participation is driven by, for example, childcare policies is beyond the scope of this paper. Using our data, we were also unable to obtain more details on how men balance fatherhood and work. It is, however, crucial that we learn more about how young men and women balance work and family, and how young parents make use of formal and informal childcare arrangements across different family policy contexts. In addition, our analyses confirm the relevance of the basic characteristics of the partner early in an individual's family and work career. As it is increasingly clear that the trajectories of

young adults emerge from interactions of the individual, the couple, and the policy context, additional couple data (to disentangle the effect of, for example, educational homogamy and age difference) are badly needed, and should thus be included in new data collection efforts.

Second, our results do not confirm the findings of the literature, which suggest that highly educated women proceed to motherhood much faster than less educated women after they finish their education (i.e., norm transgression hypothesis). On the contrary, a positive relationship was found between the amount of time spent in education and the later timing of cohabitation (for both men and women), which again points towards maximisation strategies. The more years young adults spent in education, the longer they waited before they moved in with a partner.

Third, family-constrained trajectories were found to be much more common among women who were in female-dominated areas of study, like health care or personal care, especially compared to the partner-constrained or initially unconstrained trajectories. While we were unable to assess whether this effect reflects differences in preferences or differences in opportunities, our findings indicated that it was much less prevalent among men. Moreover, both men and women who pursued studies in the arts and humanities had patterns of work-family trajectories which differed from those of men and women in other study fields, as they were less likely to start a family, or did so later. A dynamic selection process seems to have been going on among the respondents in this study area, which might have been the outcome of their chosen lifestyle (cf. Hoem, Neyer, and Andersson 2006 for women studying in the arts and humanities).

Overall, education seems to have been more relevant for women's trajectories, while labour market conditions seem to have been more relevant for men's trajectories (see also Liefbroer and Corijn 1999). Having found a job rapidly and having held a high-prestige first job reduced the odds of experiencing a family-constrained trajectory among men (which indicates that they prioritised their work career), but not among women. Unfavourable labour market conditions at the start of their career were associated with trajectories characterised by part-time work and unemployment among women. These trajectories were much less common among men.

Our analyses only observed young adults up to age 29. At that age, 59% of the men and 41% of the women in the study had not (yet) had their first child. The average age at first birth in Flanders at the time these women were interviewed was 27, and is now 28 (Kind en Gezin 2013). This implies that a large share of the men and the women in the survey have not made the transition to parenthood. The question of how work and family life decisions and their determinants are different for this group than for the group observed in this study remains unanswered. As the transition to adulthood takes place over an increasingly long period of life, researchers studying this transition who want to cover its main markers need to consider wider age ranges. Nevertheless, as

our findings clearly show that work-life trajectories are already gendered in early adulthood, we can expect these trajectories to diverge even more as these respondents progress in their careers.

Finally, the young adults in our study were interviewed before the beginning of the economic recession, which started in 2008-2009 in most European countries, including in Belgium. Our finding that early career establishment is essential in the further lives of young women and men suggests that the lives of younger cohorts who entered the labour market around the time of the onset of the economic crisis and beyond may be even more vulnerable. Our case study of Flanders indicates that this crisis might affect not only their careers, but also their partners' careers and their joint family lives. More comparative work across Europe which captures not only various family policy contexts, but also differences in economic opportunities, is needed to determine whether – and, if so, how – young adults master this situation. The extent to which these coping strategies succeed could have long-lasting consequences for the next generation.

References

- Aassve, A., Billari, F.C., and Piccarreta, R. (2007). Strings of adulthood: A sequence analysis of young British women's work-family trajectories. *European Journal of Population* 23: 369–388. doi:10.1007/s10680-007-9134-6.
- Abbott, A. (1984). Event sequencing and event duration. *Historical Methods* 17: 192–204. doi:10.1080/01615440.1984.10594134.
- Abbott, A. and Forest, J. (1986). Optimal matching methods for historical sequences. *Journal of Interdisciplinary History* 16(3): 471–494. doi:10.2307/204500.
- Abbott, A. and Hrycak, A. (1990). Measuring resemblance in sequence data: an optimal matching analysis of musicians' careers. *American Journal of Sociology* 96(1): 144–185. doi:10.1086/229495.
- Abbott, A. and Tsay, A. (2000). Sequence analysis and optimal matching methods in sociology. *Sociological Methods and Research* 29(1): 3–33. doi:10.1177/0049124100029001001.
- Anderson, D.J., Binder, M., and Krause, K. (2002). The motherhood wage penalty: Which mothers pay it and why? *The American Economic Review* 92(2): 354–358. doi:10.1257/000282802320191606.
- Anderson, D.J., Binder, M., and Krause, K. (2003). The motherhood wage penalty revisited: Experience, heterogeneity, work effort, and work-schedule flexibility. *Industrial and Labor Relations Review* 56(2): 273–294. doi:10.2307/3590938.
- Andersson, R. and Olsson, A.-K. (1999). *Fields of training: Manual*. Thessaloniki: European Centre for the Development of Vocational Training.
- Baerts, A., Deschacht, N., and Guerry, M.-A. (2008). *Carrières van mannen en vrouwen: Een literatuurstudie*. Brussels: Vrije Universiteit Brussel.
- Becker, G.S. (1985). Human capital, effort, and the sexual division of labor. *Journal of Labor* 3(1): S33–S58. doi:10.1086/298075.
- Blossfeld, H.-P. (1995). *The new role of women. Family formation in modern societies*. Boulder: Westview.
- Blossfeld, H.-P. and Huinink, J. (1991). Human capital investments or norms of role transition? How women's schooling and career affect the process of family. *American Journal of Sociology* 97(1): 143–168. doi:10.1086/229743.

- Budig, M.J. and Hodges, M.J. (2010). Differences in disadvantage: Variation in the motherhood penalty across white women's earnings distribution. *American Sociological Review* 75(5): 705–728. doi:10.1177/0003122410381593.
- Budig, M.J. and England, P. (2001). The wage penalty for motherhood. *American Sociological Review* 66(2): 204–225. doi:10.2307/2657415.
- Cobb-Clark, D.A. and Dunlop, Y. (1999). Role of gender in job promotions. *Monthly Labor Review* 122: 32.
- Dex, S. (1991). *Life and work history analyses: Qualitative and quantitative developments*. London/New York: Routledge (Sociological Review Monograph 37).
- Dex, S., Joshi, H., Macran, S., and McCulloch, A. (1998). Women's employment transitions around child bearing. *Oxford Bulletin of Economics and Statistics* 60(1): 79–98. doi:10.1111/1468-0084.00087.
- Drolet, M. (2002). Wives, mothers and wages: Does timing matter? Ottawa: Statistics Canada, Research paper; 186.
- Duquet, N., Glorieux, I., Laurijssen, I., and Van Dorsselaer, Y. (2010). An unfinished job? The effect of subject choice and family formation processes on labour market outcomes of young men and women. *Journal of Education and Work* 23(4): 319–338. doi:10.1080/13639080.2010.484800.
- Elder, G.H. (1994). Time, human agency, and social change: Perspectives on the life course. *Social Psychology Quarterly* 57(1): 4–15. doi:10.2307/2786971.
- Esping-Andersen, G. (2009). *The incomplete revolution. Adapting to women's new roles*. Cambridge: Policy Press.
- Fernández-Kranz, D., Lacuesta, A., and Rodríguez-Planas, N. (2010). Chutes and ladders: Dual tracks and the motherhood dip. Bonn: Forschungsinstitut zur Zukunft der Arbeit, Discussion paper series; 5403.
- Gabadinho, A., Ritschard, G., Müller, N.S., and Studer, M. (2011). Analyzing and visualizing state sequences in R with TraMineR. *Journal of Statistical Software* 40(4): 1–37.
- Ginther, D.K. and Sundström, M. (2010). Does marriage lead to specialization? An evaluation of Swedish trends in adult earnings before and after marriage. Stockholm: Swedish Institute for Social Research, Stockholm University, Working Paper; 2010/1.

- Glorieux, I., Laurijssen, I., Minnen, J., and van Tienoven, T.-P. (2010). In search of the hurried leisure class: Time-use surveys and patterns of leisure consumption. *Journal of Consumer Policy* 33(2): 163–181. doi:10.1007/s10603-010-9124-7.
- Gustafsson, S. (2003). Optimal age at motherhood. Theoretical and empirical considerations on postponement of maternity in Europe. In: Zimmermann, K.F. and Vogler, M. (eds.). *Family, Household and Work*. Berlin/Heidelberg: Springer-Verlag: 345–367. doi:10.1007/978-3-642-55573-2_17.
- Gustafsson, S. (2005). Having kids later. Economic analyses for industrialized countries. *Review of Economics of the Household* 3: 5–16. doi:10.1007/s11150-004-0977-x.
- Gustafsson, S., Kenjoh, E., and Wetzels, C. (2002). The role of education in postponement of maternity in Britain, Germany, the Netherlands and Sweden. In: Ruspini, E. and Dale, A. (eds.). *The gender dimension of social change: The contribution of dynamic research to the study of women's life courses*. Bristol: The Policy Press: 55–79.
- Hank, K. (2002). Regional social contexts and individual fertility decisions: A multilevel analysis of first and second births in Western Germany. *European Journal of Population* 18: 281–299. doi:10.1023/A:1019765026537.
- Hoem, J.M. (1986). The impact of education on modern family-union initiation. *Journal of Population* 2: 113–133. doi:10.1007/BF01796886.
- Hoem, J.M., Neyer, G., and Andersson, G. (2006). The relationship between educational field, educational level, and childlessness among Swedish women born in 1955–59. *Demographic Research* 14(15): 331–380. doi:10.4054/DemRes.2006.14.15.
- Hogan, D.P. (1978). The variable order of events in the life course. *American Sociological Review* 43(4): 573–586. doi:10.2307/2094780.
- Kalmijn, M. (1996). Effecten van opleidingsniveau, duur en richting op het tijdstip waarop paren hun eerste kind krijgen. *Bevolking en Gezin* 1: 41–71.
- Kan, M.Y. (2007). Work orientation and wives' employment careers: An evaluation of 's Preference Theory. *Work and Occupations* 34(4): 1–23.
- Kind, en Gezin (2013). *Het kind in Vlaanderen 2013*. Brussels: Kind en Gezin.
- Klerman, J.A. and Leibowitz, A. (1999). Job continuity among new mothers. *Demography* 36(2): 145–155. doi:10.2307/2648104.

- Koelet, S. (2005). Standvastige verschillen. Een analyse van theoretische benaderingen over de verdeling van het huishoudelijke werk van vrouwen en mannen op basis van tijdsbudgetonderzoek. [PhD thesis]. Brussels: Vrije Universiteit Brussel.
- Kogan, I. and Schubert, F. (2003). General indicators on transition from school to work. Youth transitions from education to working life in Europe. Part I. Brussels: Eurostat, Statistics in Focus. Population and Social Conditions. Theme 3; 4/2003.
- Korenman, S. and Neumark, D. (1991). Does marriage really make men more productive? *The Journal of Human Resources* 26(2): 282–307. doi:10.2307/145924.
- Kravdal, Ø. (1994). The importance of economic activity, economic potential and economic resources for the timing of first births in Norway. *Population Studies* 48(2): 249–267. doi:10.1080/0032472031000147786.
- Kreyenfeld, M. (2000). Educational Attainment and First Births : East Germany before and after Unification. Rostock: Max Planck Institute for Demographic Research, MPIDR Working Papers; 2000-011.
- Kurz, K., Steinhage, N., and Golsch, K. (2005). Case study Germany. Global competition, uncertainty and the transition to adulthood. In: Blossfeld, H.-P., Klijzing, E., Mills, M., and Kurz, K. (eds.). *Globalization, uncertainty and youth in society*. London/New York: Routledge: 47–78.
- Lappegård, T. (2002). Education attainment and fertility pattern among Norwegian women. Oslo: Statistics Norway, Documents; 2002/18.
- Lappegård, T. and Rønsen, M. (2005). The Multifaceted impact of education on entry into motherhood. *European Journal of Population* 21(1): 31–49. doi:10.1007/s10680-004-6756-9.
- Laurijssen, I. (2012). Verdeeld tussen arbeid en gezin. Een panelstudie naar de context en dynamiek van de keuze voor deeltijds werk. [PhD thesis]. Brussels: Vrije Universiteit Brussel.
- Laurijssen, I. and Glorieux, I. (2010). Tijdsdruk en de combinatie van arbeid en gezin. Een verkennende analyse op basis van de SONAR data. Leuven: Steunpunt Studie en Scholloopbanen, SSL-report; SSL/OD2/2010.21.
- Lesnard, L. (2006). Optimal matching and the social sciences. Paris: Institut National de la Statistique et des Etudes Economiques, CREST Working Paper; 2006-01.

- Liefbroer, A.C. and Corijn, M. (1999). Who, what, where, and when? Specifying the impact of educational attainment and labour force participation on family formation. *European Journal of Population* 15(1): 45–75. doi:10.1023/A:1006137104191.
- Liefbroer, A.C. (2005). The impact of perceived costs and rewards of childbearing on entry into parenthood: Evidence from a panel study. *European Journal of Population* 21: 367–391. doi:10.1007/s10680-005-2610-y.
- McRae, S. (2003). Constraints and choices in mothers' employment careers: A consideration of Hakim's Preference Theory. *British Journal of Sociology* 54(3): 317–338. doi:10.1080/0007131032000111848.
- Miller, A.R. (2011). The effects of motherhood timing on career path. *Journal of Population Economics* 24(3): 1071–1100. doi:10.1007/s00148-009-0296-x.
- Mills, M. (2004). Stability and change: The structuration of partnership histories in Canada, the Netherlands, and the Russian Federation. *European Journal of Population* 20(2): 141–175. doi:10.1023/B:EUJP.0000033862.83081.ad.
- Mills, M. and Blossfeld, H.-P. (2005). Globalization, uncertainty and the early life course. In: Blossfeld, H.-P., Klijzing, E., Mills, M., and Kurz, K. (eds.). *Globalization, uncertainty and youth in society*. London/New York: Routledge: 1–24.
- Moen, P. and Sweet, S. (2004). From “work-family” to “flexible careers”. *Community, Work and Family* 7(2): 209–226. doi:10.1080/1366880042000245489.
- Oppenheimer, V.K. (1988). A theory of marriage timing. *American Journal of Sociology* 94(3): 563–591. doi:10.1086/229030.
- Oppenheimer, V.K. (2003). Cohabiting and marriage during young men's career-development process. *Demography* 40(1): 127–149. doi:10.2307/3180815.
- Oppenheimer, V.K., Kalmijn, M., and Lim, N. (1997). Men's career development and marriage timing during a period of rising inequality. *Demography* 34(3): 311–330. doi:10.2307/3038286.
- Petersen, T., Penner, A.M., and Hogsnes, G. (2011). The male marital wage premium: Sorting vs. differential pay. *Industrial and Labor Relations Review* 64(2): 283–304.
- Pollmann-Schult, M. (2011). Marriage and earnings: Why do married men earn more than single men? *European Sociological Review* 27(2): 147–163. doi:10.1093/esr/jcp065.

- Rindfuss, R.R., Morgan, S.P., and Offutt, K. (1996). Education and the changing age pattern of American fertility: 1963-1989. *Demography* 33(3): 277–290. doi:10.2307/2061761.
- Rohwer, G. and Pötter, U. (2005). *TDA user's manual*. Bochum: Ruhr-Universität-Bochum.
- Rosenfeld, R.A., Van Buren, M.A., and Kallberg, A.L. (1998). Gender differences in supervisory authority: Variation among advanced industrialized democracies. *Social Science Research* 27(1): 23–49. doi:10.1006/ssre.1997.0609.
- Sixma, H. and Ultee, W.C. (1983). Een beroepsprestigeschaal voor Nederland in de jaren tachtig. *Mens en Maatschappij* 58: 360–382.
- Skirbekk, V., Kohler, H.-P., and Prskawetz, A. (2004). Birth month, school graduation, and the timing of births and marriages. *Demography* 41(3): 547–568. doi:10.1353/dem.2004.0028.
- Stone, J., Netuveli, G., and Blane, D. (2007). Modelling socioeconomic trajectories: An optimal matching approach. *International Journal of Sociology and Social Policy* 28(5/6): 217–230.
- Taniguchi, H. (1999). The timing of childbearing and women's wages. *Journal of Marriage and the Family* 61(4): 1008–1019. doi:10.2307/354020.
- Van Bavel, J. (2010). Choice of study discipline and the postponement of motherhood in Europe: The impact of expected earnings, gender composition and family attitudes. *Demography* 47(2): 439–458. doi:10.1353/dem.0.0108.
- Van Bavel, J. (2012). The reversal of gender inequality in education, union formation and fertility in Europe. *Vienna Yearbook of Population Research* 10: 127–154. doi:10.1553/populationyearbook2012s127.
- Waite, L.J. (1995). Does marriage matter? *Demography* 32(4): 483–507. doi:10.2307/2061670.
- Waldfogel, J. (1997). The effect of children on women's wages. *American Sociological Review* 62(2): 209–217. doi:10.2307/2657300.